

## **Amendments to the Specification**

Please replace Paragraph [0021] with the following amended paragraph:

[0021] In addition to the cavity boundary 45, the shown internal configuration of bell 40 includes an annular trough 47, arranged and suited in the shown configuration for the purpose of positioning a sealing gasket or other materials. This annular trough 47 may be located immediately adjacent the internal side of bell lip ~~40~~, ~~44~~, as it appears in the shown embodiment (Fig. 1), or it may divide cavity boundary 45 into two axially separated sections. This annular trough 47 is bounded at its radial extreme by a trough terminus 42, which may be cylindrical as shown in the figures, or may be of other geometry, and is bounded on axially inward and outward sides a first interior surface and a second interior surface opposing the first interior surface, shown in the figures as a first wall 43 and second wall 41, respectively. Trough first and second walls 43 and 41 are generally radially extending, though they may have a curved or slanted geometry, so long as they do not detract from the ability to brace the mured braking effect described in summary above or in greater detail below. As shown in Figure 1, the second wall 41 is joined to cavity boundary 45 at a shoulder that serves as an insertion fulcrum 46 during assembly, but which during extraction movements of spigot 70 bears no force and presents no radially inward cam-type influence on segment 1. Notably in the shown embodiment, the segment 1 possesses no radially outwardly protruding surfaces outside of annular trough 47 that would impede substantially straight-line movement of segment 1 as a whole in the direction of the bell lip 44.

Please replace paragraph number [0029] with the following amended paragraph:

[0029] As the gasket is compressed, it will be evident to those in the art that the locking segment 1 will rotate such that the toe 13 moves radially outwardly, but ~~heel~~ brake 12, being engaged with the annular trough 47, has a limited range of radial movement. In operation, during insertion the shown

locking segment 1 rotates against insertion fulcrum 46, pivoting about this point as an axis of rotation. It will be understood by those in the art that although the insertion fulcrum 46 is shown as a right-angle shoulder, alternative embodiments of the joint described and claimed herein may form insertion fulcrum 46 as a rib raised in a radially inward direction from the cavity boundary 45, or as a depression at the intended location for locking segment 1, recessed radially outwardly from cavity boundary 45 to create a more gentle or a cammed fulcrum or other effect. The locking segment 1 is constructed and oriented in such a manner as to allow the locking segment 1 enough rotational freedom within the annular trough 47 and the annular gap 60 to accommodate entry of the spigot 70 into the cavity 49. With the particular embodiment shown, due to the closely mated profiles of the heel 12 and the annular trough 47, the radially outward rotation of toe 13 as it pivots on insertion fulcrum 46 may be limited by the contact between insertion brake 5 (which may be coincident with outer corner 4) and a wall of trough 47. In addition to other reasons, the inventors have drawn the locking segment 1 in this manner to take advantage of the enhanced retention of the gasket 30 in annular trough 47 made possible by braking rotation of the locking segment 1 on insertion. The shown configuration allows sufficient rotation to allow insertion of spigot 70 without extrusion or gouging of the surface of spigot 70. In some applications, the user may desire to provide a tighter fit, even one that causes such gouging or scraping, in order to ensure an early bite of the tooth 7 into spigot 70.

Please replace paragraph number [0031] with the following amended paragraph:

[0031] In response to extraction movements of the spigot 70, locking segment 1 will attempt to move in an extraction direction along with spigot 70, but axial movement of the entire body of locking segment 1 is prevented by the pressing of brake 12 against first wall 43. Locking segment 1 then rotates such that toe 13 moves radially inwardly toward spigot 70. As the locking segment 1 of the shown embodiment rotates, the slope of brake 12 allows that portion of

locking segment 1 to slide upwards against the wall of annular trough 47, preventing premature binding. The rotation of locking segment 1 is caused even in the absence of a pre-existing engagement of tooth 7 with spigot 70 due to friction between the spigot 70 and the ~~bulb~~ gasket 30 in which locking segment 1 is disposed. If not already in biting engagement, as such rotation continues, tooth 7 engages with spigot 70 by digging into the surface of spigot 70. Thus the further movement of spigot 70 causes a concomitant radially inward rotation of toe 13. Those in the art will understand that the relationship between the force of the axial thrust pressures on spigot 70 is by this process transferred in part into a radially inward force between the spigot 70 and the locking segment. The dynamic nature of the relationship results in increased biting, or digging of tooth 7, into spigot 70 as the pressures increase. To a point, this increasing radial pressure is advantageous, as greater radial pressure and the bite of tooth 7 exerted thereby may be necessary in response to greater axial extraction forces. It will be understood, however, that each spigot 70 will have a maximum sustainable radial pressure threshold, above which radial pressures exerted by the locking segment 1 cause or make likely a complete penetration of the spigot 70 by locking segment 1, and thus failure of the joint. As described below, the arrangement of locking segment 1 in concert with bell 40 prevents exceeding such pressures in the current invention.

Please replace paragraph number [0032] with the following amended paragraph:

[0032] The brake 12 of the locking segment 1 fits within annular trough 47 in such a manner that it has limited rotational freedom. Upon rotation of toe 13 radially inwardly, it will be understood that brake 12 also rotates. Due to the confines of annular trough 47, rotation of brake 12 is arrested by the muring of brake 12 between the first wall ~~41~~ 43 and the second wall 41. For the sake of clarity, Applicant notes that by the terms 'muring' and 'mures,' we mean throughout this disclosure that the segment adopts a position in which further rotation is constrained by the walls. As shown, the braking elbow 2 is forced

during this muring against the first wall **43**, and the forward brake **3** is forced against the second wall **41**, resulting in a braked position for segment **1**. It should be understood that, while forward brake **3** and braking elbow **2** are shown in the figures as terminating points on the inward side **14** and of the outward side **11** of brake **12**, the invention is not so limited. Either or both forward brake **3** and brake elbow **2** can be protrusions from the respective sides, not necessarily located at the corners, so long as they are capable of muring between the first wall and the second wall in response to rotation. Additionally, given the variations in spigot and bell diameters experienced in real world applications, some configurations of brake **12** having a more rounded profile may not have a discreet pinpointable forward brake **3** or braking elbow **2**, so long as rotation of brake **12** causes points to mure between the first wall and the second wall. By operation of this muring, the rotation of brake **12** is arrested; in turn, as will now be evident, the rotation of the entire locking segment **1** is arrested (except, perhaps, for deformation that may occur to the locking segment **1** or to first wall **43** or second wall **41**). As the rotation of locking segment **1** cannot continue, the radial pressures exerted by toe **13** on spigot **70** will not increase, despite an increase in axial thrust pressures. Contrast is drawn to the continuing increase in radial pressure that would be expected in the absence of a rotational braking mechanism. The invention may be used to cause the plateau for this pressure line, if graphed, to occur below a pressure at which spigot **70** is deemed likely to fail.